# Confirmed Minutes of the 117<sup>th</sup> Meeting of the Advisory Council on the Environment held on 12 July 2004 at 2:30 p.m.

#### **Present:**

Prof. LAM Kin-che, J.P. (Chairman)

Prof. HO Kin-chung, B.B.S

Mr. Peter Y. C. LEE

Prof. LUNG Ping-yee, David, S.B.S., J.P.

Prof. POON Chi-sun

Mr. Otto L. T. POON, B.B.S.

Mr. Michael J. D. RUSHWORTH

Mr. Markus SHAW

Ms. Iris TAM, J.P.

Prof. WONG Tze-wai

Prof. WONG Yuk-shan, B.B.S., J.P.

Ms. Jessie WONG (Secretary)

#### **Absent with Apologies:**

Prof. Peter HILLS

Dr. NG Cho-nam, B.B.S

Mrs. Mei NG, B.B.S

#### In Attendance:

Dr. Sarah LIAO, J.P. Secretary for the Environment, Transport and Works Mr. Keith KWOK, J.P. Permanent Secretary for the Environment, Transport

and Works (Environment)

Ms. Doris CHEUNG Deputy Secretary for the Environment, Transport

and Works (Environment)1

Mr. Roy TANG

Deputy Secretary for the Environment, Transport

and Works (Environment)2

Mr. Rob LAW, J.P. Director of Environmental Protection

Dr. P M SO Senior Conservation Officer (Biodiversity)

Agriculture, Fisheries and Conservation Department

Mr. Jimmy LEUNG Assistant Director/Technical Services

Planning Department

Mr. Matthew LEUNG Secretariat Press Officer, Environment, Transport

and Works Bureau (ETWB)

Mrs. Pauline LING Press Secretary to Secretary for the Environment,

Transport and Works

Ms. Polly LEUNG Principal Information Officer

Environmental Protection Department (EPD)

Miss Petula POON Chief Executive Officer (E), ETWB

Mr. Eddie CHENG Executive Officer (E), ETWB

#### In Attendance for Agenda Item 4:

Mr. Raymond CHEUNG Director of Drainage Services

Mr. Raistlin LAU Principal Assistant Secretary for the Environment,

Transport and Works (Environment) 1, ETWB

Mr. Benny WONG Assistant Director (Waste and Water), EPD

Mr. John GALL Vice President, Camp Dresser & McKee

International Inc.

#### In Attendance for Agenda Item 5:

Mr. Charles WONG Principal Assistant Secretary (Security), Security

Bureau

Mr. Augustine NG Assistant Director of Planning/Territorial, Planning

Department

Mr. TANG Wai-yip Chief Engineer/Land Works, Civil Engineering and

Development Department (CEDD)

Mr. LI Kam-sang Senior Engineer/Land Formation 2, CEDD Mr. K M YEUNG Project Manager, Mott Connell Limited

Dr. Anne F KERR Environmental Team Manager, Mott Connell

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<u>Action</u>

On behalf of the Council, <u>the Chairman</u> congratulated Prof. Ho Kin-chung, Dr. Ng Cho-nam and Prof. Wong Yuk-shan who were awarded the Bronze Bauhinia Star on 1 July 2004.

# <u>Agenda Item 1 : Confirmation of Minutes of the 116<sup>th</sup> Meeting held on 7</u> June 2004

2. The draft minutes were confirmed without amendment.

### **Agenda Item 2 : Matters Arising**

#### Para. 2 The land filling activities at She Shan Tsuen

3. Mr. Jimmy Leung reported that the Planning Department was exploring with the Department of Justice on the feasibility of tightening up control of land filling activities on agricultural zones under Outline Zoning Plans, and would report to the Council once ready. The Chairman requested Secretariat

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the Secretariat to keep in view and bring up the matter in due course.

# <u>Agenda Item 3 : Report on the 86th Meeting of the Environmental Impact Assessment Subcommittee</u>

(ACE Paper 19/2004)

(ACE Paper 21/2004)

4. The Chairman of the Environmental Impact Assessment Subcommittee (EIA) briefed Members on the report. Members noted the Subcommittee's views on the three guidance notes discussed at the meeting and endorsed the notes.

# Agenda Item 4: Harbour Area Treatment Scheme (HATS) Stage 2 Way Forward for the HATS Stage 2 (ACE Paper 20/2004) Findings of Trials and Studies Relating to the HATS Stage 2

- 5. The Chairman welcomed the presentation team to the meeting. A Member declared interest as his company was involved in Stage 1 of HATS and the trials on compact sewage treatment technology. The Chairman suggested and Members agreed that the Member could remain in the meeting but abstain from discussion. Dr. Sarah Liao then introduced the plan on the HATS Stage 2 and Mr. Benny Wong presented the findings of the trials and studies and the proposed way forward. The Chairman said that since the subject involved many technical and complicated issues, the meeting would be an initial exchange of views with the Administration only. Further meetings on the subject would be arranged and Members would not be rushed to draw any conclusion at the moment.
- 6. <u>A Member</u> said that the HATS Stage 2A was related to sewage collection on Hong Kong Island and the upgrading of sewage treatment to include Chemically Enhanced Primary Treatment (CEPT) and disinfection so as to bring significant improvements to the water quality in the Harbour. Hence, Stage 2A should be implemented as soon as possible regardless whether the Biological Aerated Filters (BAF) technology was accepted or not. As regards Stage 2B, it would improve the overall water quality of the South China Sea and reduce the risk of harmful algal blooms and should be implemented after Stage 2A.
- 7. Noting that the BAF technology had never been applied to salinated sewage and in hot and humid area, <u>a Member</u> asked whether the Administration was confident about its effective application in Hong Kong. In response, <u>Mr. Raymond Cheung</u> said that tests had been conducted to assess the performance of the biological process under the conditions in Hong Kong.

They had also made reference to other countries' experience, such as the 0.5M cum/day capacity treatment plant in Norway. The BAF technology was modulated in nature. Hence, a 1M m³/d capacity plant could be built from ten 0.1M m³/d BAF units. However, a very sophisticated control system would be required and very skilled persons were needed to operate it. Plants using that technology had operated satisfactorily in other countries.

- 8. <u>A Member</u> supported the phased approach as the CEPT technology could achieve most of the water quality criteria. He asked whether phasing would be considered in Stage 2A as well in view of possible changes in the population forecast. In response, Mr. Benny Wong explained that the current phased approach was based on water quality considerations. It might be possible to implement Stage 2A in different stages on cost-effectiveness grounds. Mr. Raymond Cheung supplemented that while the sewage treatment works could be optimized through proper phasing, it would be difficult and uneconomical to construct the tunnels and transfer systems in phases.
- 9. <u>A Member</u> pointed out that Stages 2A and 2B were different qualitatively, and changes in the population projection should not affect the latter's implementation. He asked whether Stage 2B would be dropped if the population growth were not as rapid as predicted. In response, <u>Mr. Benny Wong</u> said that the HATS project was designed to tackle the sewage requirements of 6.27M projected population and 3.85M employment population. At present, the population in the HATS catchment areas was 4.5M and the employment population was 2.6M. Stage 2B would be required eventually but how fast the projected population levels would be reached was difficult to predict with accuracy. The phased approach would provide the flexibility required and avoid over-provision.
- 10. <u>A Member</u> suggested using both BAF and CEPT in Stage 2A. In reply, <u>Mr. Benny Wong</u> explained that one of the benefits of phased implementation was that if Stage 2A was implemented with CEPT only, it would only require the land that was already available and works could start very soon. If BAF was also adopted, it would require a larger piece of land and take a much longer time to start the project. <u>Dr. Sarah Liao</u> said that it would be important to kick-start Stage 2A as soon as possible. As CEPT was a well-tested technology and its performance was reliable, it could be adopted for Stage 2A right away. <u>Another Member</u> informed the meeting that the Hong Kong Polytechnic University had conducted a study on CEPT and considered it a simple and very reliable technology to improve water quality. DSD might wish to make use of that information and convince the public, if necessary.

- 11. In response to a Member's enquiry about the risk of centralizing all sewage treatment facilities on Stonecutter Island, Mr. Benny Wong explained that an elaborated risk assessment had been conducted on all the The assessment examined various components of the system in terms of the likelihood and the consequence of failure. In such way, high-risk components were identified and mitigation measures, such as provision of stand-by units, were proposed. He added that large sewage treatment plants were always designed with multiple units operating in parallel. Since the chance of all units failing at the same time would be quite remote, the risk would be manageable by providing adequate stand-by units. He referred Members to the Environmental and Engineering Feasibility Study Final Report which included the mentioned risk assessment and was available from the web site <www.cleanharbour.gov.hk>. Mr. John Gall supplemented that overall speaking, Hong Kong's sewage treatment works would still be a "distributed system" after implementing the HATS Stage 2. While the sewage treatment works in the HATS catchment areas would be centralized, other treatment works would still be operating in Sha Tin, Tai Po, etc. Mr. Raymond Cheung said that most risks associated with centralization could be minimized through proper design. Certain risk associated with a centralized scheme such as that caused by an aircraft crash on the sewage treatment facility could not be minimized but such risk should be very remote.
- 12. <u>A Member</u> was concerned that the construction works of Stage 2A, which would last for ten years, would cause inconvenience to the public. He also asked whether the project would tie in with the harbour reclamation project. In response, <u>Mr. Raymond Cheung</u> said that some inconvenience would be unavoidable but since the works involved mainly construction of deep tunnels, the disturbance should be minimal. He also added that since the tunnels would be built under the Harbour, no reclamation would be required.
- 13. <u>A Member</u> supported the recommendations of the consultation document and the phased approach. However, he felt that the re-opening of beaches in Tsuen Wan might not be a very big appeal to the public, as few swimmers would use the beaches there. The resumption of the cross-harbour swimming contest might not be a good idea either. In view of its heavy traffic, the Harbour would be not suitable for swimming even though its water quality had improved significantly. On the contrary, the public would be able to appreciate the benefits if the improvements in water quality were elaborated. In response, <u>Dr. Sarah Liao</u> said that the majority of the public might still not be able to fully understand the water quality objectives. Many people would just want to know whether the water quality of the Harbour was good enough for swimming. <u>Another Member</u> agreed that one of the biggest attractions of the project was to re-open beaches in Tsuen Wan.

- 14. Noting that the sewage treatment works in Stage 2B would be built quite near to the residential areas in Lai Chi Kwok, a Member asked how the odour problem would be addressed. In response, Mr. Raymond Cheung said that the sewage treatment plant would be enclosed, and deodorization would be applied. Similar treatment was being applied to other sewage treatment plants. Mr. John Gall supplemented that odour treatment had been taken into account in their cost estimate, and there would be enough space in the site for implementing deodorization measures. Dr. Sarah Liao said that it would be necessary to convince the public that those measures would be effective. In any event, an EIA study would be conducted and the odour problem would be addressed in that context. Mr. Benny Wong said that the current idea was to build the sewage treatment plant underground. Another Member considered that in order to mitigate the not-in-my-backyard syndrome, some attractive community facilities could be planned on top of an underground sewage treatment plant for the benefit of the residents in the district.
- 15. In response to a Member's question on any possible institutional oversight in Stage 2A and 2B, Mr. Raymond Cheung explained that quite a number of technical and contractual problems were encountered in Stage 1 of HATS. Subsequently, a comprehensive post-implementation review was conducted. The Administration would make reference to the experience gained and avoid similar problems when implementing Stage 2 of the project. He was of the view that those problems were not caused by institutional oversight but were matters of risk management.
- 16. <u>A Member</u> supported the project as it would improve the hygiene conditions and reduce the risk of infectious diseases. As Hong Kong had developed from an industrial city into one with more emphasis on tourism, it would be critical to improve the Harbour's water quality. In view of the large system of tunnel networks to be built in Stage 2A, he suggested reserving space for the network of other utility facilities so as to reduce road opening works in future. In response, <u>Mr. Raymond Cheung</u> explained that the tunnels which were around 100-150 metres beneath ground level were too deep for other utilities. In addition, they would be filled with sewage all the time and maintenance of any utilities inside the tunnels would be impossible. <u>Mr. Keith Kwok</u> informed the meeting that common utility enclosures would only be considered in new development areas.
- 17. In response to a Member's question on the air quality impact of sludge incineration, Mr. Benny Wong said that according to the strategy study on sludge treatment and disposal conducted in 1999, incineration was considered as the best among the many methods under study. In his view, air

pollution could be minimized by modern flue gas cleaning technology and there would be no problem in meeting the stringent air quality objectives. Members were consulted on that study in 2000 and the recommendations were supported. A review would be conducted in due course to see if there were better solutions, and Members would be consulted again as appropriate. Another Member said that the new generation of incinerators could address air pollution problems and that incineration had been successfully applied in densely populated areas such as London and Tokyo for sludge treatment.

- 18. <u>The Chairman</u> referred to a Member's written questions on the project and said that the questions were the same as those raised by the Member at the meeting of the Environmental Affairs Panel of Legislative Council, and a written response had already been provided by the Administration.
- 19. As a separate matter, <u>a Member</u> pointed out that the river and marine water quality figures set out in ACE Paper 23/2004 had showed overall improvements since 2000. However, individual indicators did not seem to show similar improvements. <u>The Chairman</u> suggested tackling the question outside the meeting.

(Post-meeting note: The Administration provided a written response to the Member's question on 27 July 2004. The written reply was copied to Members for information.)

20. The Chairman said that since the consultation exercise would last for five months, Members should discuss the issue with their respective professional bodies as appropriate. In addition, a special meeting would be arranged in due course for Members to discuss the subject with relevant experts such as the local members of the International Review Panel in greater details. The Council would then meet the Administration again and offer its views. Dr. Sarah Liao appealed to Members to consult their constituencies and clarify points which might have been misinterpreted. The Chairman thanked Dr. Liao and the presentation team for attending the meeting.

## Agenda Item 5: Prison Development at Hei Ling Chau

<u>Proposed Prison Development Plan at Hei Ling Chau and the Site Selection Process</u>

(ACE Paper 22/2004)

Feasibility Study for Land Formation and Infrastructure Works for Prison Development at Hei Ling Chau

(ACE Paper 24/2004)

21. The Chairman welcomed the presentation team to the meeting.

<u>A Member</u> declared interest as her company was a sub-contractor of the consultancy study. <u>The Chairman</u> suggested and Members agreed that she could remain in the meeting but abstain from discussion. <u>Mr. Charles Wong</u> introduced the proposed development plan, and <u>Mr. Augustine Ng</u> and <u>Mr. K</u> <u>M Yeung</u> briefed Members on the site selection process and the findings of the feasibility study respectively. <u>The Chairman</u> said that the Council had received a number of petition letters from various groups. Some of the views were related to the need for the prison development and the co-location concept which were outside the remit of the Council, they would not be discussed.

- A Member pointed out that in view of the area of land required, not many options were available. He feared that the size factor would leave the Council with very few choices other than the proposed site. In his view, splitting up the project into two smaller ones would open up more options. Another Member enquired about the nature of the present consultation exercise and asked if it would preempt the EIA process, as he understood that a site selection should be included in the EIA. Mr. Charles Wong assured Members that the consultation would not preempt the Council's consideration of the future EIA report. The purpose of the meeting was to update Members on the latest position of the proposed development plan, as a lot of views relating to environmental issues had been received during the public consultation currently underway.
- 23. A Member asked whether projection of the penal population had been made for the next 30 years, and whether prison facilities would be sufficient to meet the demand. He suggested setting up prison facilities in the Mainland, as it would be more cost-effective and less environmentally damaging. In response, Mr. Charles Wong said that at present, the penal population and the penal places were some 13,000 and 11,000 respectively. By 2015, the penal population would grow to 14,000, and would reach 15,000 by 2024. There was no projection beyond 2024. He said that setting up prison facilities in the Mainland would not be conducive to the rehabilitation of prisoners since it would be difficult for them to be visited by relatives and In addition, under the "one country, two systems" principle, Hong Kong should tackle its own prisoner problems. Another Member pointed out that some 30% of the prisoners were Mainlanders and there was no point in keeping or rehabilitating them in Hong Kong. A better arrangement with the Mainland might reduce the penal population significantly.
- 24. In response to a Member's question on the traffic impact on the South Lantau Road, <u>Mr. Charles Wong</u> said that the consultant had conducted a preliminary traffic impact assessment under the feasibility study. According to the study, the increased traffic would be around 700 vehicles per

day and would not affect the traffic pattern of the area significantly.

- 25. In response to a Member's comments that it was inconvenient to travel to Hei Ling Chau through the fixed crossing, Mr. Charles Wong said that ferry service would be the chief mode of transport to the island. The fixed crossing would provide an alternative to sea transport and meet specific transport needs on a daily basis. During bad weather or in case of emergency or prolonged incidents, it would provide an essential land access to the prison complex. With high-speed ferries, the journey from Hong Kong Island to Hei Ling Chau would take around 25 minutes.
- A Member was of the view that the need for a co-located prison should be considered very carefully. The possibility of expanding the existing facilities such as those in Chi Ma Wan, and replacing older prisons with new designs should be further explored. However, if a centralized facility had to be built, he agreed with Planning Department's conclusion that there were very few suitable sites available. Nonetheless, he pointed out that centralizing the prison facilities had its own management problems and could reduce employment opportunities.
- A Member disagreed that Hei Ling Chau was a suitable location for the prison development, and considered that it was a waste of public money to conduct the feasibility study. He said that before conducting the site selection process, the Government should demonstrate to the public that there was a need to expand the prison facilities; that there were more advantages in having new facilities rather than upgrading the existing ones; and that it was necessary to build the facilities in a new location. He considered that the above process should be conducted in a transparent manner and that public participation should be allowed. Finally, he indicated that he agreed with the viewpoints presented in the petition letters submitted by various green groups.
- 28. <u>A Member</u> said that if a prison of 80 ha was actually needed, it would be very difficult to find a suitable site and Hei Ling Chau might probably be the only acceptable choice. As an alternative, he suggested setting up an artificial island by means of landfills and building the prison complex on the island.
- 29. Mr. Augustine Ng said he fully appreciated the community's concerns on the proposed prison development at Hei Ling Chau but referred Members to his earlier presentation which acknowledged that site selection was not easy and that finding a "problem-free" location was impossible and unrealistic. He stressed that the Planning Department fully acknowledged the issues relating to the proposed prison development at Hei Ling Chau which

would be mitigated in accordance with the requirements of the EIA Ordinance, but locating the prison elsewhere would create more problems. In Planning Department's view, Hei Ling Chau was selected as a "lesser of the evils." He said that while appreciating the concerns of the opponents to the proposed site at Hei Ling Chau, despite his appeals to them during various forums, so far none of them had come up with a less problematic alternative. He was grateful for some Members' views that Hei Ling Chau would probably be the only option if 80 ha of land would be required. A Member clarified that Hei Ling Chau seemed to be the least evil option if 80 ha of land was needed. However, 80 ha was a huge piece of land, and whether such a size was required for the development should be considered carefully.

- A Member said that with the limited information presented at 30. the meeting, it would not be possible to say that other locations were not suitable. For instance, the Yam O option in North Lantau was removed simply because it was near the Disney theme park. However, as far as he was aware, there were mountain ranges between the two places. In response, Mr. Augustine Ng said that there was a lot of information to support the site selection process but due to the time constraint, his earlier presentation had to Yam O was at the gateway to the Disney theme park and would not be suitable for prison development though there was a mountain in between. As regards the transparency of the site selection process, he said that the Living Island Movement had obtained the site selection information under the Code of Access to Information. In his view, it would be more effective for the Planning Department to do the technical assessment first and consult the public on their recommendation on the project site and, given the nature of the development, he was doubtful whether anything could be achieved by asking the public to advise, out of nothing, where the prison should be located. When a preferred location was identified, the Legislative Council and District Council had been consulted. The public was also being consulted as part of the feasibility study. It was therefore unfair to criticize that there was a lack of transparency in the process.
- 31. <u>A Member</u> expressed concern that the conservation value of Hei Ling Chau might be overlooked. As an endemic species, namely the Bogadek's Burrowing Lizard, was found on the island, he was worried that the unique habitat might be destroyed by the project. While other sites were rejected on the grounds of ecological concerns, it seemed that there was not enough consideration of the conservation value of Hei Ling Chau. He then pointed out that the "no development" option should be considered in the future EIA study.
- 32. In view of the huge size of land required, <u>a Member</u> considered that the provision of about 100 m<sup>2</sup> for each prison inmate was rather generous.

He also noted that some sites, such as the reclaimed site in Tseun Kwan O, were removed either because they were too small or because they had been earmarked for other developments. However, those sites could be expanded by further reclamation and that the earmarked developments could be reviewed. He emphasized that additional reclamation at Tseung Kwan O would be a lot less environmentally damaging than reclamation at Hei Ling Chau. In addition, the possibility of expanding the existing prison facilities should also be examined. Another Member agreed and considered that Kong Nga Po, though near the border, could be a suitable site.

Mr. Charles Wong reiterated the need for the prison development to solve the overcrowding problem on a long-term basis. He added that many of the existing prison facilities were old. Half of them would be over 40 years old by 2013, the earliest time that the prison development at Hei Ling Chau, if approved, would be completed. It was also very expensive to maintain those old facilities. Moreover, some facilities were not purpose-built. The project would also allow the strengthening and streamlining of penal operation and lead to considerable economy of scale. Due to the time constraint, Mr. Wong undertook to provide copies of an information pamphlet on the policy background of the proposed development for Members' reference after the meeting.

Security Bureau

(Post-meeting note : the information pamphlets were distributed to Members on 20 July 2004.)

34. The Chairman thanked the presentation team and said that the Council was concerned about the site selection process and the environmental impacts of the proposed prison development. He hoped that the Administration would consider Members' suggestions of replacing the proposed super prison with two to three new facilities of smaller scale and identifying alternative sites(s) for such purpose.

#### **Agenda Item 6: Any Other Business**

Visit to Tung Chung Stream on 9 July 2004

35. <u>The Chairman</u> reported that a Council Member, some members of the Specialist Group and he himself visited Tung Chung Stream on 9 July. He was impressed by the reinstatement works and commended the parties involved.

Opening up of the Council's meetings to the public

36. The Chairman referred to a Member's suggestion in a letter

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distributed to Members before the meeting on the opening up of the Council's meetings to the public, and invited the Secretary to brief Members on the Council's previous discussion on the issue. The Secretary then reported that at the meeting held in March 2003, the issue was discussed but there was no consensus. The conclusion was that the status quo should be maintained, as some Members had reservation on whether they could be free to express views when meetings were opened to the public. The Chairman considered that the decision made in 2003 should stand for the rest of the term which would expire on 31 December 2004. The matter should be brought up for discussion by Members of the next term. For reappointment or new appointments for the next term, the Members should be made aware of the possibility of opening up of Council meetings to the public before acceptance of appointment.

Secretariat

#### Tentative items for discussion at the next meeting

37. The Chairman informed the meeting that the proposal to require registration and mandatory labeling of the content of volatile organic compounds in paints, printing inks and selected consumer products was tentatively scheduled for discussion at the next meeting.

#### **Agenda Item 8 : Date of Next Meeting**

38. The next meeting would be held on 9 August 2004.

ACE Secretariat July 2004